Conservation Security Program – 2005
Nebraska Watersheds (Middle Big Blue, Turkey, Upper Big Blue, West Fork Big Blue)

Air Resources Management Enhancements

A2-Immediately incorporate or inject field applied animal wastes

Immediately incorporate or inject field applied animal wastes at least 2 inches below the soil surface.
Payment Rate = $5.00 / Acre / Year for those acres where field applied animal waste is immediately incorporated or injected to at least 2 inches below the soil surface.

A3-Use perennial or annual trap strips during critical wind erosion periods

Refer to Conservation Practice 589C, Cross Wind Trap Strips, for more information regarding design and installation of perennial or annual trap strips.
Payment Rate = $1.00 / Acre / Year for those acres receiving benefit from the installation and or maintenance of cross wind trap strips.

Energy Management Enhancements

E1.1-Energy Audit of Agriculture Operations

An energy audit identifies and evaluates energy management opportunities on the farm or ranch. During an audit, a baseline is developed to characterize and record energy use. Individual unit operations, processes, and major energy-consuming equipment are evaluated to identify energy management opportunities and high-return-on-investment projects. Typically an action report is produced that describes the baseline, each conservation opportunity area, an estimate of the cost to implement the changes, the savings that will be generated, and an estimation of the payback period.
Payment Rate = $500.00 / Energy Audit. This is a one time enhancement activity payment.

E1.2-Recycle 100% of On-Farm Lubricants

For purposes of CSP, farm lubricants are defined as oils, fluids, or greases, including all mineral-based oils, synthetic oils, or semi-synthetic oils used to reduce friction in equipment and machinery. Recycling involves disposal of lubricants through a recycling company or depot. Burning is not considered recycling unless burning is performed in a furnace that has been certified by EPA to meet or exceed all emission standards for the area.
Payment Rate = $200.00 / year for recycling of **all on-farm lubricants.**

E2-Renewable Energy Fuel (Soy Biodiesel, Ethanol)

Using renewable energy fuels can eliminate the use of toxic fuel additives, such as MTBE (Methyl Tertiary Butyl Ether); reduce air and water pollution; and reduce greenhouse gas emissions. Under CSP, payments will be made to qualifying producers for the *bio-based portion* of eligible blended fuels in 100-gallon increments. A companion Job Sheet, "Renewable Fuel Records," is also available from NRCS field offices to assist with record keeping and converting fuel blends into components that may be eligible for payment as CSP enhancements.
Payment Rate = $25.00 per 100 gallon increments of **the bio-based portion of renewable fuels.**

E3.1-E3.3-Energy Use Reduction (5%, 10%, & 20%)

The CSP provides an annual payment for energy reduction to applicants who enroll in the program. The payment is based on reduction rates of 5 percent, 10 percent, and 20 percent of total British Thermal Units (Btu's)[2] consumed on the farm or ranch. A companion Job Sheet, "Btu Conversion Charts," also is available from NRCS field offices to assist with converting a variety of energy measurement units into Btu's. Opportunities for energy conservation are available in almost every application or operation on the farm or ranch. Energy conservation can be achieved from simple management changes, such as shifting energy consuming irrigation to hours of low evapotranspiration or conscientiously completing scheduled maintenance so that systems work at optimal levels.
Payment Rate = $100.00 / Year for a 5% energy use reduction; $200.00 / Year for a 10% energy use reduction; $500.00 / Year for a 20% energy use reduction.

Energy Management Enhancements – cont.

E3.4-Renewable Energy Generation (Wind, Solar, Geothermal & Methane)

While gaining efficiency and practicing conservation can create significant savings, farmers and ranchers can add energy generation to their operations. For many farmers and ranchers, solar, wind, biogas (methane generation), and, in some instances, geothermal or hydropower energy, can be generated and used on the farm to conserve energy and increase energy independence. In order to encourage increased energy production from renewable sources, USDA, through the CSP, will provide payments to qualified agricultural producers for each 100 kilowatt hour equivalents of electricity they generate.

Payment Rate = $2.50 / 100 KWH generated.

E4.1-E4.3-STIR Rating (60, 30, & 15)

Soil Tillage Intensity Rating (STIR) is a calculation based on the location of cropland and the Crop Management System that the producer employs on that land. It is an index used to evaluate the kind, severity and number of ground disturbing tillage passes on soil quality. Higher numbers indicate greater disturbance; lower numbers indicate less disturbance. The components of STIR are: operating speed of tillage equipment, tillage type, tillage depth, and the percent of surface area disturbed. Weights are assigned to each component to calculate a rating. This rating is useful in making residue management decisions. It is one of three outputs from the Revised Universal Soil Loss Equation Version 2.0. (RUSLE2). The other outputs are a soil loss estimate and a soil organic matter trend estimate from the Soil Conditioning Index. Payment levels range from $0 - $0.90 per acre.

E5.1-90% Use of Manures and/or Legumes to Supply Crop Nutrient Needs

Livestock manure and legumes (or other green manures) are excellent fertilizer for the soil, providing such nutrients as nitrogen, phosphorus, calcium, magnesium, micronutrients, potassium, and organic matter. Using alternative fertilizers to inorganic compounds will benefit the soil's water-holding capacity and tilth. Additionally, this approach can reduce the consumption of fossil fuels and minerals used in the production of inorganic fertilizer, conserving energy in the process. However, when using these alternative sources, it is still essential to follow good management practices in order to avoid damage to the crop and hazards to the environment. Because the ratios of nitrogen to phosphorus and potassium in manure is lower than this ratio in the crop, use of manure alone to supply 90 percent of the crop nutrients needs will result in an over application of phosphorus and potassium. Therefore, good agronomic practice would indicate use of more than one organic source to achieve this energy enhancement.

Payment Rate = $1.10 / Acre / Year to apply manure to supply 90 percent of crop nutrient needs. The payment applies only to those acres receiving manure.

E5.2-Annual Legumes in Crop Rotation

Annual legumes (soybeans) in rotation.

Payment = $0.10 / Acre/ Year where the crop rotation includes soybeans or other annual legumes. Payment applies to only those acres where the crop rotation includes annual legumes at least every other year.

E5.3-Perennial Legumes in Crop Rotation

Payment = $0.70 / Acre/ Year where the crop rotation includes perennial legumes such as alfalfa. Payment applies to only those acres that include perennial legumes in rotation at least 50% of the time (e.g. 5 years of alfalfa followed by 5 years of corn). All acres that currently have a perennial legume such as alfalfa in place qualify for this payment.

Grazing Management Enhancements

G1-Removal of non-native/invasive species along upland drainages

Species targeted for removal are woody species which may be located or situated at the head or along side upland drainages which encourage cattle loafing areas to occur. Species may include, for example, hedge, locust, elm, or cedar. Due to this occurrence, erosion and denuded soils become common. Extensive gully erosion, head cutting, increased nutrient deposition due to livestock concentration, is common on these sites. Removal methods should be selected that will not contribute to erosion such as selective hand-cutting, or use of mechanical equipment with rubber skids which reduces soil disturbances. Native species such as bur oak and native shrub thickets should not be considered for removal.

Payment Rate = $1.00 annually, for managed acres where target species are removed by approved methods and area is monitored and maintained for the length of the contract.

G2-Modify burn prescription to manipulate plant species composition

The timing of prescribed burns to change species composition in an area to reach resource goals. Prescribed burning can be a management tool to reduce or control certain plant species such as smooth brome or annual brome grasses. The prescribed burn plan should identify the targeted plant species and describe the management objectives of the burn.

Payment Rate = $1.00 for each acre treated with a modified burn prescription.

G3-Increase the number of management units to decrease occupational periods

Changing the current grazing system to allow for an increase in rest periods to occur in an effort to improve plant health and vigor through rest. The grazing plan should identify one or more key plant species that serve as indicators of management effectiveness so that appropriate rest periods can be prescribed. The grazing plan should document the planned length of grazing periods in pastures and length of time between grazing periods for an overall reduction in total grazing activity per pasture.

Payment Rate = $1.00 for each acre receiving decreased periods of livestock occupation by increasing the number of management units.

G4-Rotation of salt, mineral, and supplemental feeding areas

Management of supplements so that these areas of concentrated livestock use are rotated in a manner that will promote improved livestock distribution. Supplements should be located away from watering points, or in strategic locations that otherwise encourage better livestock distribution. Area locations should be documented on a map annually.

Payment Rate = $1.00 for each acre in management units where supplement rotation practice is applied.

G5-Manage access to riparian areas

Manage access to riparian areas by either the movement of livestock through a grazing system, constructing riparian protection fences, creating limited access points for livestock watering, or other management tools proven to discourage livestock disturbances from occurring in the riparian area. Livestock occupation periods in riparian areas should be limited so that no more than 50% of the current year growth of vegetation is utilized. The length of the period of occupation in the grazing plan should be identified and streambank erosion mitigation measures need to be addressed.

Payment Rate = $2.00 per acre for all riparian acres in management unit where riparian area access is properly managed.

Grazing Management Enhancements – cont.

G6-Construct animal trails and walkways to provide access to all pastures

The construction of animal trails, walkways, or lanes which are used in grazing systems, providing access to pastures used in a grazing system. Creation of specific trails or walkways may reduce the extent of soil compaction, effects on infiltration and reduce soil losses through erosion. Trails, corridors and walkways are commonly used in intensively managed improved pasture grazing systems.

Payment = $1.00 for each acre located in the management unit where trails or walkways are installed.

G7-Manage grazing to benefit wildlife species or insects of concern

Grazing systems designed to provide benefit to a targeted wildlife or insect species, by deferring grazing or establishing rest periods which benefit the target species. The wildlife species of concern should be identified in the grazing plan. A monitoring plan developed as part of the grazing prescription should include a method that specifically measures the level of habitat maintenance or improvement. An example would be to maintain plant cover or structure at a cover index value determined appropriate for Columbian Sharp-tailed grouse.

Payment Rate = $1.00 for each acre treated with a grazing system designed and implemented to benefit targeted wildlife or insect species.

Note: Participant may not be paid concurrently for CSP species-specific wildlife enhancements on the same acres.

G8-Reduce wintertime confinement of animals to four months or less

Prolonged confinement of animals in solitary lots, pens or pastures can impair soil quality, negatively affect plant health and vigor, and increase erosion. Grazing systems that include strategies to prolong the grazing season within forage balances can reduce the negative effects of livestock confinement periods.

Payment Rate = $1.00 for each acre used for wintertime confinement which meets the desired non-prolonged confinement of four months or less.

G9-Develop additional water source(s) to improve livestock distribution

The water source should be strategically placed so that utilization of vegetation within the pasture becomes more uniform, or that under-utilized areas are grazed while over-utilized areas receive less grazing pressure.

Payment Rate = $1.00 for all acres inside management units where additional water sources are developed. This payment will be initiated the year additional water sources are developed and applied.

G10-Grazing deferment to improve prescribed burning effectiveness

The implementation of a grazing system which promotes a fuel load desirable for carrying out effective prescribed burns. Generally 800-1000 lbs per acre of air-dry fuel is required. A full season of grazing deferment may be required to build effective fuel loads to carry out an effective prescribed burn.

Payment Rate = $3.00 for each acre deferred from grazing to promote a fuel load capable of providing a prescribed burn which meets the desired effect.

G11-Utilize decision support tools to aid in grazing plan development

The use of an approved grazing decision support tool, to achieve more consistent, or effective results from grazing management plans. These tools may include, NUTBAL, GSAT, Grazing Response Indexes, or other programs that help analyze individual or numerous parameters of grazing management for decision support.

Payment Rate = $1.00 per year for acres with annual grazing management plans where decision support tools are used to help in the grazing management decision making process.

Grazing Management Enhancements – cont.

G12-Inter-seed legumes into pasture to extend grazing season

The use or inclusion of desirable legume species to aid in providing high quality forage availability and to extend grazing seasons. The legumes should include native, adapted or desirable species that either provide improvement in pasture production, improve soil quality, or contribute to improved wildlife habitat. Documentation of improved pasture production either through pasture condition scoring or other methods should be included in the monitoring portion of the grazing plan.

Payment Rate = $1.00 for each acre where legumes have been inter-seeded to extend the grazing season.

Habitat Management Enhancements

H1-Tall, undisturbed small grain stubble from harvest through winter:

The intent of this enhancement is to provide potential nesting cover and winter cover and food for a wide array of wildlife species (song birds, game birds, big game, small mammals, and furbearers) that utilize small grain fields for habitat. This enhancement requires that small grain (e.g. wheat, oats, etc.) constitute a reasonable portion of the crop rotation within a field (e.g. at least 1 in 5 years) The small grain stubble must average a minimum height of 12 inches post-harvest and cannot be mowed, hayed, grazed, tilled, or otherwise manipulated between harvest and March 31st of the following year. Herbicide applications are allowed after September 1st.

Payment Rate = $1.00/Acre/Year on all cropland with small grain in rotation with this management

H2-Early success ional habitat on field borders, buffers, odd areas adjacent to cropland:

The intent of this enhancement is to provide high quality nesting, brood-rearing, feeding/pollinating, loafing, and winter cover for most wildlife, including insects, song birds, and game birds, in an area where this habitat type is limiting. This enhancement requires that grassland habitats such as field borders, filter strips, contour buffer strips, and odd areas such as pivot corners and abandoned farmsteads which are located adjacent to cropland be managed to improve overall habitat values. These areas must be a minimum of 30 feet wide and contain at least two native or desired introduced grasses as well as one or more perennial forbs/legumes which comprise 10% or more of the stand composition. Invasive grasses such as smooth brome and Kentucky bluegrass cannot account for more than 10 of the stand composition unless they are intensely managed for early successional habitat (see bobwhite quail information). They must also be protected from annual haying, grazing, or burning. Management may include periodic (every 3-4 years) tillage or prescribed burning followed by interseeding of desired grasses, forbs, and/or legumes.

Payment Rate = $25.00/Acre/Year on “managed buffer acres” (applies to every year)

H3-Unharvested alfalfa buffers in preferred locations – (10% of field):

The intent of this enhancement is to provide secure nesting areas for various bird species (game and non-game) that are attracted to alfalfa fields and rely on taller, undisturbed vegetation during the spring and summer. Other wildlife benefits include providing suitable brood-rearing, hiding, feeding/pollination, and winter cover for many different species of wildlife. This enhancement requires that alfalfa constitute a substantial portion of the crop rotation within a field (e.g. 5 in 10 years). A minimum of 10% (not less than 1 acre) of the total acreage within a field used for alfalfa hay production be set-aside and remain unharvested through the duration of the growing season until March 31st of the following year. All areas must be 30 feet wide or greater to meet the requirements of the enhancement. Preferred locations within the field include the outer perimeter or field border as well as areas adjacent to streams, wetlands, wooded draws, etc. and corridors between these habitat types.

Payment Rate = $5.00/Acre/Year on all cropland with alfalfa in rotation with this management

Habitat Management Enhancements – cont.

H4-Modified burn prescription to create a mosaic and improve plant diversity:

The intent of this enhancement is to provide a diversity of treatments resulting in a diversity of habitat conditions in close proximity to each other on the landscape which will benefit grassland birds, pollinator insects, and other wildlife. This enhancement requires that between 25% and 75% of a "unit" (pasture) receive prescribed burning in a mosaic or "patchwork" pattern. In addition, the burn must be conducted during the dormant season (prior to March 1st) in order to increase forb composition. Ideally, livestock grazing on the treated unit would be used during the following growing season to further exemplify the diversity of habitat conditions (e.g. the patch burn-graze method). This enhancement would need to be applied at least once during the contract period.

Payment Rate = $1.00/Acre/Year for each unit or pasture identified to receive this management.

H5-Deferred grazing on pasture/rangeland for nesting habitat (July 15-April 30):

The intent of this enhancement is to provide adequate residual cover (previous year's growth) to serve as nesting cover for grassland birds for the following spring. This enhancement requires that no grazing of livestock occur between July 15th and April 30th on an average of 20% (not less than 5 contiguous acres) of the total enrolled pastureland or rangeland acres during each year. Ideally, this enhancement would be rotated to different units (pastures) each year so that each acre received deferred grazing once in a five year period. This enhancement cannot be used in conjunction with the "Light Grazing" enhancement or the Grazing Management Enhancement for "Deferred Grazing" to augment a prescribed burn.

Payment Rate = $2.00/Acre/Year for all pasture/rangeland to receive this management technique

H6-Light grazing on pasture/rangeland for vegetative structure (less than 40% utilization):

The intent of this enhancement is to provide diversity of vegetative structure (height and density of grasses and forbs) which is needed to benefit a variety of grassland birds which have specific vegetative structure needs to meet their life requisites. This enhancement requires that an average of 20% (not less than 5 contiguous acres) of the total enrolled pastureland or rangeland acres is managed using light grazing (40% utilization of current year's growth or less) by livestock during each year. Ideally, this enhancement would be rotated to different units (pastures) each year so that each acre received light grazing once in a five year period. A 'utilization cage' to prevent livestock grazing within a small area must be installed within a key wildlife area (adjacent to streams, wetlands, native woodlands, woody draws, etc.) to estimate the utilization rate. This enhancement cannot be used in conjunction with the "Deferred Grazing" enhancement.

Payment Rate = $1.00/Acre/Year for all pasture/rangeland to receive this management technique

H7-Developed woodland habitat components (brush piles, snags, etc.):

The intent of this enhancement is to provide diverse habitat components for wildlife that use: brush piles such as cottontail rabbits and other small mammals, including some that serve as prey to other wildlife species; and snags (standing dead trees) which are used by cavity-nesting birds (woodpeckers and bluebirds) for nesting, and in some cases feeding sites. If undesirable tree species are used, it will also improve the quality of the woodland or adjacent grassland/wetland habitat. This enhancement requires that one brush pile and three snags per acre of woodland be developed. Each brush pile must be a minimum of 5 feet tall and 15 feet in diameter. Each snag must be at least 6 feet tall and 6 inches in diameter at 'breast height' (4.5 feet above the ground) and one of the three needs to be a minimum of 10 inches in diameter. It is preferred that live tree species which are invading the site be used to construct the brush piles and/or snags. Examples might include Siberian elm or red cedar encroaching into a grassland/prairie area or woodlands with more desirable species such as bur oak, black walnut or hackberry present.

Payment Rate = $2.50/Acre/Year for each acre of managed woodland (paid each year)

Habitat Management Enhancements – cont.

H8-Vernal pools established for aquatic habitat:

The intent of this enhancement is to provide seasonal wetlands for use by amphibians and reptiles including frogs, toads, turtles, salamanders and others to complete their life requisites for reproduction, feeding, etc. Other benefits include providing a water source for other wildlife species and aquatic insect production which are a food source for various song birds including swallows and swifts.

This enhancement requires that each vernal pool be between 250 square feet and ¼ acre in size and have a 30 foot vegetative buffer around it. It must also be designed to pond water a minimum of 30 days during the growing season and contain woody debris (e.g. logs) to provide necessary habitat components for aquatic species.

Payment Rate = $25.00 per vernal pool that is established (paid each year).

H9-Wetland management and enhancement techniques:

The intent of this enhancement is to provide site specific management to a wetland and associated upland buffer to improve the habitat quality for the wide array of wildlife species that rely on these areas for various life requisites. This enhancement requires that the management plan be developed in conjunction with and approved by a wildlife biologist. The plan must document targeted wildlife species and associated habitat types being addressed and include objectives which specify the amount and timing and purpose of management actions within these habitat types. Examples of appropriate techniques include using tillage, prescribed burning, herbicides, livestock grazing, etc. to set-back wetland vegetation; "seasonally" restore hydrology on drained or manipulated wetlands during the migration period (October 15 to March 31); artificially supply water to the wetland to serve as migration habitat or to facilitate another technique; etc.

Payment Rate = $25.00/Acre/Year on "managed wetland acres" (applies to every year)

H10-Habitat Index for Northern Bobwhite Quail

The Bobwhite Quail Home Range Habitat Evaluation Tool is used to determine the habitat index value. Biologists or trained field office personnel are to complete the assessment in the field to arrive at the index value. All tracts of land that are contiguous to each other will be evaluated as one unit with an overall average score using each 40 acre parcel within it. If a tract is segregated from other lands by a public road or other lands, it will be evaluated separately and may qualify for a different payment level. Payment levels range from $0 - $10.00 per acre.

H11-Habitat Index for Greater Prairie Chicken

The Prairie Chicken Home Range Habitat Evaluation Tool is used to determine the habitat index value. Biologists or trained field office personnel are to complete the assessment in the field to arrive at the index value. All tracts of land that are within one mile proximity of each other will be evaluated as one unit with an overall average score using each field or pasture within it. If a tract is segregated from other lands by more than one mile, it will be evaluated separately and may qualify for a different payment level. Payment levels range from $0 - $10.00 per acre.

Other Habitat Management Related Enhancements Within Other Categories:

- Improved vegetative buffers on cropland (field borders, filter strips, etc.) – See Surface Water Quality Enhancements
- Increased crop diversity with small grains or legumes in rotation – See "3 Crops in 4Years" under Pest Management
- Reduced disturbance to crop stubble post-harvest to provide winter food/cover – See "S.C.I." under Soil Management
- Restoring quality species diversity on pasture and rangeland – See "Prescribed Burning" under Grazing Management
- Providing appropriate grazing management on rivers and streams – See "Riparian Areas" under Grazing Management
- Removing invasive tree species on prairie habitats – See "Woody Species in Uplands" under Grazing Management

Nutrient Management Enhancements

NW1-Organic waste applications

Soil Sampling Requirements

- Producers have the option to use a geo-referenced (GIS) zone management, grid soil sampling, or a combination of the two (i.e. deep nitrates may be based on zone management, and surface tests on grids).
- Grid soil sampling areas (grids) will be 5 acres or less and geo-referenced zone management soil sampling areas (zones) will be 20 acres or less.
- When using geo-referenced zone management, soil sampling zones will be based on GIS yield maps and/or infrared maps, similar cropping practices (i.e. past crops, manure and fertilizer management).and similar site and soil conditions throughout the entire zone (i.e. similar soil texture, soil color, organic matter, slope, drainage, etc.) .
- Surface soil tests for P, K, pH and micronutrients will be taken at least once every five years.
- Annual deep nitrate soil samples (0-36 inches or deeper on irrigated cropland, and 0-24 inches or deeper on dryland cropland) are taken from November 1 through the spring every year that corn, milo, or other non-legume crops are planted (spring tests are required on sandy soils, nitrate tests are not needed for legumes).
- Procedures published by the University of Nebraska (Nebguide G91-1000-A "Guidelines for Soil Sampling in Nebraska) are to be followed by the individual taking the soils samples.

Nutrient Application Requirements

- The Phosphorus Index (rating must be medium or lower) will be used to determine the appropriate timing, method, and rate of manure application (N-Based, P-Basis/rotation).
- Manure or other organic waste (supplemented with fertilizer N for P-based plans) is applied at varying rates on each grid/zone to meet Nitrogen needs as determined, based on University of Nebraska recommendations.
- All sources of N including irrigation water N content, legume credits, manure applications from up to 3 years ago, residual profile N, and organic matter mineralization, is accounted for in determining N application rates in each zone/grid.

Payment Rate = $4.00 / Acre / Year

NW2-Apply manure only to fields that have low soil phosphorous levels

- Apply manure only to soil sampling areas within fields that have soil phosphorus levels below maximum agronomic levels 50 ppm Bray 1-P (or equivalent for other soil testing methods) to prevent the build up of soil phosphorus.
- Soil sampling areas are 40 acres or less following sampling procedures published by the University of Nebraska (Nebguide G91-1000-A "Guidelines for Soil Sampling in Nebraska).
- This enhancement can be used along with other nutrient management enhancements.

Payment = $2.00 / Acre / Year

Nutrient Management Enhancements – cont.

N1-Precision agricultural grid sampling and/or zone management application for N,P

Soil Sampling Requirements

- Producers have the option to use a geo-referenced (GIS) zone management, grid soil sampling, or a combination of the two (i.e. deep nitrates may be based on zone management, and surface tests on grids).
- Grid soil sampling areas (grids) will be 5 acres or less and geo-referenced zone management soil sampling areas (zones) will be 20 acres or less.
- Geo-referenced zone management, will use soil sampling zones based on GIS yield maps and/or infrared maps, similar cropping practices (i.e. past crops, manure and fertilizer management).and similar site and soil conditions throughout the entire zone (i.e. similar soil texture, soil color, organic matter, slope, drainage, etc.).
- Surface soil tests for P, K, pH and micronutrients will be taken at least once every five years.
- Annual deep nitrate soil samples (0-36 inches or deeper on irrigated cropland, and 0-24 inches or deeper on dryland cropland) will be taken from November 1 through the spring every year that corn, milo, or other non-legume crops are planted (spring tests are required on sandy soils, nitrate tests are not needed for legumes).

Nutrient Application Requirements

- All crop nutrients will be precision applied using a variable rate applicator that is geo-referenced.
- Phosphorus will be applied in amounts equal or less than the University of Nebraska recommended rates.
- Nitrogen will be applied at varying rates on each soil sampling area based on University of Nebraska recommendations.
- To maximize Nitrogen use efficiency, Nitrogen will be applied using one of the following methods/combinations: spring only applications, growing season only applications (i.e. side-dress or chemigation through sprinkler irrigation systems); split application (spring and growing season required on coarse textured soils i.e. sand, loamy sand, sandy loam soils, fall and growing season acceptable on heavy soils); and/or chemigation through sprinkler irrigation systems (growing season only) for nitrogen in summer row crops.
- Nitrogen will be split applied (planting time and late winter to early spring), or applied in the late winter to early spring for fall planted small grain.

Payment Rate = $8.00 / Acre / Year

N2-Precision agriculture grid sampling/application based on 20 ac or less grid size w/ GPS referenced sampling points

Soil Sampling Requirements

- Soil sampling areas are 20 acres or less with GPS referenced sampling points (to determine trend) following sampling procedures published by the University of Nebraska (Nebguide G91-1000-A "Guidelines for Soil Sampling in Nebraska).
- Surface tests for P, K, pH and micronutrients are taken once every three years during the same time of year.
- Annual deep nitrate soil samples (0-36 inches or deeper on irrigated cropland, and 0-24 inches or deeper on dryland cropland) are taken from November 1 through the spring every year that corn, milo, or other non-legume crops are planted (spring tests are required on sandy soils, nitrate tests are not needed for legumes).

Nutrient Application Requirements

- Phosphorus will be applied in amounts equal or less than the University of Nebraska recommended rates.
- Nitrogen will be applied at varying rates on each soil sampling area, based on University of Nebraska recommendations.
- All sources of N including irrigation water N content, legume credits, manure N, residual profile N, and organic matter mineralization, is accounted for in determining N application rates on each soil sampling area.
- To maximize Nitrogen use efficiency, Nitrogen will be applied using one of the following methods/combinations: spring only applications, growing season only applications (i.e. side-dress or chemigation through sprinkler irrigation systems); split application (spring and growing season required on coarse textured soils i.e. sand, loamy sand, sandy loam soils, fall and growing season acceptable on heavy soils); and/or chemigation through sprinkler irrigation systems (growing season only) for nitrogen in summer row crops.
- Nitrogen will be split applied (planting time and late winter to early spring), or applied in the late winter to early spring for fall planted small grain.

Payment Rate = $6.00 / Acre / Year

Nutrient Management Enhancements – cont.

N3-N, P sampling / applications based on 20 ac or less soil sample areas

Soil Sampling Requirements

- Soil sampling areas are 20 acres or less following sampling procedures published by the University of Nebraska (Nebguide G91-1000-A "Guidelines for Soil Sampling in Nebraska).
- Surface tests for P, K, pH and micronutrients are taken once every three years during the same time of year
- Annual deep nitrate soil samples (0-36 inches or deeper on irrigated cropland, and 0-24 inches or deeper on dryland cropland) are taken from November 1 through the spring every year that corn, milo, or other non-legume crops are planted (spring tests are required on sandy soils, nitrate tests are not needed for legumes).
- When recent (3 years old or less) deep nitrate soil test values tested low (6ppm or less), deep nitrate soil samples are not necessary on dryland cropland without manure history.

Nutrient Application Requirements

- Phosphorus will be applied in amounts equal or less than the University of Nebraska recommended rates.
- Nitrogen will be applied at varying rates on each soil sampling area, based on University of Nebraska recommendations.
- All sources of N including irrigation water N content, legume credits, manure N, residual profile N, and organic matter mineralization, is accounted for in determining N application rates on each soil sampling area.
- To maximize Nitrogen use efficiency, Nitrogen will be applied using one of the following methods/combinations: spring only applications, growing season only applications (i.e. side-dress or chemigation through sprinkler irrigation systems); split application (spring and growing season required on coarse textured soils i.e. sand, loamy sand, sandy loam soils, fall and growing season acceptable on heavy soils); and/or chemigation through sprinkler irrigation systems (growing season only) for nitrogen in summer row crops.
- Nitrogen will be split applied (planting time and late winter to early spring), or applied in the late winter to early spring for fall planted small grain.

Payment Rate = $5.00 / Acre / Year

N4-N, P sampling / application based on 40 ac or less soil sample areas

Soil Sampling Requirements

- Soil sampling areas are 40 acres or less and the producer must follow the sampling procedures published by the University of Nebraska (Nebguide G91-1000-A "Guidelines for Soil Sampling in Nebraska).
- Surface tests for P, K, pH and micronutrients are to be taken once every three years during the same time of year.
- Annual deep nitrate soil samples (0-36 inches or deeper on irrigated cropland, and 0-24 inches or deeper on dryland cropland) are taken from November 1 through the spring every year that corn, milo, or other non-legume crops are planted (spring tests are required on sandy soils, nitrate tests are not needed for legumes).
- When recent (3 years old or less) deep nitrate soil test values tested low (6ppm or less), deep nitrate soil samples are not necessary on dryland cropland without manure history.

Nutrient Application Requirements

- Phosphorus will be applied in amounts equal or less than the University of Nebraska recommended rates.
- Nitrogen will be applied at varying rates on each soil sampling area, based on University of Nebraska recommendations.
- All sources of N including irrigation water N content, legume credits, manure N, residual profile N, and organic matter mineralization, is accounted for in determining N application rates on each soil sampling area.
- To maximize Nitrogen use efficiency, Nitrogen will be applied using one of the following methods/combinations: spring only applications, growing season only applications (i.e. side-dress or chemigation through sprinkler irrigation systems); split application (spring and growing season required on coarse textured soils i.e. sand, loamy sand, sandy loam soils, fall and growing season acceptable on heavy soils); and/or chemigation through sprinkler irrigation systems (growing season only) for nitrogen in summer row crops.
- Nitrogen will be split applied (planting time and late winter to early spring), or applied in the late winter to early spring for fall planted small grain.

Payment Rate = $4.00 / Acre / Year

Nutrient Management Enhancements – cont.

N5-Eligible Nebraska NRCS buffer practices

Eligible Nebraska NRCS buffer practices include: Contour Buffer Strips (Std 332), Riparian Herbaceous Cover (Std 390), Riparian Forest Buffer (Std. 391), Filter Strip (Std 393), Grassed Waterway (Std 412), and Field Border (Std 386). These practices must meet the minimum standards and specifications listed in the Nebraska NRCS Field Office Technical Guide, Section IV. Buffer areas must be a minimum width of the practice as listed in the Nebraska NRCS Field Office Technical Guide, Section IV, Conservation Practice Standards. The enhancement(s) must be on contiguous fields that are benefited by buffer practices. The total acreage of contiguous fields will be combined for purposes of computing the percent of cropland acres of buffer practices installed. All buffers must meet the function and purpose of the surface water quality enhancement. Operation and maintenance of all buffers must be adequate (see Practice Standards).

N-5 – 5% to 10% of cropland acres are benefited by acres of installed buffer practices.
N-6 – >10% to 15% of cropland acres are benefited by acres of installed buffer practices.
N-7 – >15% of cropland acres are benefited by acres of installed buffer practices.

Payment Rate = $2.50 / Acre / Year that a minimum of 5% to 10% of the cropland acres be benefited by the acres in buffers; $5.00 / Acre / Year that greater than 10% to 15% of the cropland acres be benefited by the acres buffered; $10.00 / Acre / Year that greater than 15% of the cropland acres be benefited by the acres buffered.

Pest Management Enhancements

P1-All fields meet organic requirements

Crop scouting with treatment thresholds determined prior to treatment is required. Pest mgt. record history will be maintained. All cropland fields meet USDA organic farming requirements.
Payment Rate = $7.00 / Acre / Year to apply USDA organic farming requirements. Payment applies only to those acres meeting organic farming requirements.

P2-Three crop types in 4 years

Crop scouting with treatment thresholds determined prior to treatment is required. Pest mgt. record history will be maintained. Only situations with intermediate, very low or low risk of loss to leaching and runoff are allowed (i.e., WinPST soil/pesticide interaction analysis conducted). Crop rotation is used (minimum diversity of 3 crop types in four years with at least one of those crops being small grain or legume).
Payment Rate = $7.50 / Acre / Year to apply Integrated Pest Management principles with low risk pesticides and using a crop rotation of at **least 3 crop types in 4 years with at least one of those crops being small grain or legume.**

P3-Two crop types in 3 years

Crop scouting with treatment thresholds determined prior to treatment is required. Pest mgt. record history will be maintained. Only situations with intermediate or less risk of loss to leaching and runoff are allowed (i.e., WinPST soil/pesticide interaction analysis conducted). Crop rotation is used (minimum diversity of 2 crop types in 3 years with no more than 1 low residue crop).
Payment Rate = $2.50 / Acre / Year to apply Integrated Pest Management principles with low risk pesticides and using a crop rotation of at least **2 crop types in 3 years with no more than 1 low residue crop.**

Pest Management Enhancements – cont.

P4-Win-PST rating intermediate or less

Crop scouting with treatment thresholds determined prior to treatment is required. Pest mgt. record history will be maintained. Only situations with intermediate or less risk of loss to leaching and runoff are allowed (i.e., WinPST soil/pesticide interaction analysis conducted). All pesticides applied by band method or spot spraying. Crop rotation is used with a high residue crop following low residue crops (minimum diversity of two crop types with no low residue crops following low residue crops).

Payment Rate = $4.00 / Acre / Year to apply Integrated Pest Management principles with low risk pesticides and a crop rotation consisting of a high residue crop following a low residue crop (minimum diversity of two crop types with no low residue crops following low residue crops).

Soil Management Enhancement

S1-Soil Conditioning Index

The Soil Conditioning Index (SCI) is a tool that can predict the consequences of cropping systems and tillage practices on the trend of soil organic matter. Organic matter is a primary indicator of soil quality and an important factor in carbon sequestration and global climate change. The SCI has three main components: 1) the amount of organic material returned to or removed from the soil; 2) the effects of tillage and field operations on organic matter decomposition; and 3) the effect of predicted soil erosion associated with the management system. The SCI gives an overall rating based on these components. If the rating is a negative value, the system is predicted to have declining soil organic matter. If the rating is a positive value, the system is predicted to have increasing soil organic matter. Each field will be evaluated separately and may qualify for a different payment level. Payment levels range from $0 - $29.00 per acre.

Water Management Enhancement

I1-Irrigation Enhancement Index Level 1-6

Irrigation water management quality criteria must be met for Tier III participation. For the Conservation Security Program (CSP), the minimum requirement for water quantity – irrigation water management on cropland or pastureland is considered achieved when the current level of treatment and management for the system results in a water use efficiency value using CSP Irrigation Enhancement Index Tool of at least 50%. A producer can improve the irrigation enhancement index value by agreeing to implement various irrigation enhancement actions listed in the Index Tool that will result in higher index rating. Payment levels range from $0 - $12.00 per acre.